

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C.

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OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

Mr. M. F. Redington
Energy & Environmental Engineer
Olin Corporation
Brass Division
East Alton, IL 62024

EPA Region 5 Records Ctr.
382847

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STATE OF ILLINOIS C.

Dear Mr. Redington,

The Waste Characterization Branch of the Office of Solid Waste has completed their secondary review of the petition for exclusion submitted by the Olin Corporation's East Alton, Illinois facility. Before a final determination can be made, the following additional information is required.

- 1) What volume of sludge is present in the Emergency Holding Lagoon and what is the size of this lagoon. What will be the ultimate disposal fate of this sludge?
- In the original petition, Olin indicates on page 7 of 9 the EP toxicity test results for E-H Lagoon Sludge. Please explain why the EP toxicty test results reported in your April 1, 1982 letter are so much greater than those reported in the original petition. In addition, please explain why the hexavalent chromium EP leachate concentrations are greater than the total chromium EP leachate concentrations initially reported. On page 8 of 9 in the original petition, total cyanide concentration in the sludge was reported to be 2.4 ppm. On April 1, 1982, Olin reported total cyanide concentrations of 16.7 ppm. Please explain why these values are so different.
- Because of this variability in the data reported, the Agency feels that additional samples should be collected and analyzed. Further, the Agency feels that the sampling scheme employed by Olin is inappropriate for collecting representative samples of the E-H Lagoon Sludge. 40 CFR 260.22 requires that a minimum of four distinct waste samples be analyzed to support a

petition for exclusion. In this case, a minimum of four separate composite samples from the E-H Lagoon would be required to demonstrate the representative nature of the waste. By compositing all the samples, Olin has only provided one distinct sample. Representative samples from the E-H Lagoon can be obtained by sampling in the following manner. lagoon should be divided into quadrants and a composite sample from each quadrant should be collected. Each composite sample should be made up of core samples designed to be representative of the waste in the Each composite sample should be analyzed for total constituent analysis and EP toxicity test leachate concentrations in the waste. Further, each sample should be analyzed for total cyanide, free cyanide, and leachable cyanide (using distilled water instead of acetic acid). Please include all recovery results and standard addition data for all EP toxicity test results reported. Please describe in detail all sampling procedures and techniques.

If you have any questions about the information requested, please do not hesitate to contact me at 202-382-4803.

Sincerely yours,

William G. Sproat, Jr. Environmental Scientist

Waste Characterization Branch (WH-565B)